AMENDMENTS TO THE CLAIMS

Claims 1-66 (Canceled).

67. (Previously Presented) A rewinding machine for winding a web material into logs comprising: a feed path for feeding web material towards a winding system; an interruption member to interrupt the web material at an end of winding of a log; a core feeder to sequentially insert winding cores in a channel defined by a rolling surface and a movable core feed member constructed and arranged so that when a core is inserted in said channel the web material is between said core and said feed member and in contact with said feed member, said feed path extending along said channel; wherein said interruption member is associated with said feed member and wherein said interruption member is arranged on a side of said feed path opposite said rolling surface and positioned at least partly on an opposite side of said feed member with respect to said channel to act on the web material through said feed member.

68. (Previously Presented) The rewinding machine as claimed in claim 67, wherein said feed member comprises a flexible member running between at least two rollers and wherein said interruption member is positioned between said

two rollers, within a closed path defined by said flexible member.

69. (Previously Presented) The rewinding machine as claimed in claim 68, wherein said flexible member comprises a plurality of parallel belts between which said interruption member operates.

70. (Previously Presented) The rewinding machine as claimed in claim 68, wherein one of said at least two rollers is a first winding roller of a surface winding cradle forming said winding system.

71. (Previously Presented) The rewinding machine as claimed in claim 69, wherein one of said at least two rollers is a first winding roller of a surface winding cradle forming said winding system.

72. (Previously Presented) The rewinding machine as claimed in claim 67, wherein said interruption member is a suction member which applies a force on said web material in a manner to obstruct feed of the web material.

73. (Previously Presented) The rewinding machine as claimed in claim 68, wherein said interruption member is a suction member which applies a force on said web material in a manner to obstruct feed of the web material.

74. (Previously Presented) The rewinding machine as claimed in claim 73, wherein said suction member comprises a counter surface along which said flexible member runs.

75. (Previously Presented) The rewinding machine as claimed in claim 69, wherein said interruption member is a suction member which applies a force on said web material in a manner to obstruct feed of the web material.

76. (Previously Presented) The rewinding machine as claimed in claim 74, wherein said interruption member is a mechanical member which acts on the web material extending through said feed member.

77. (Previously Presented) The rewinding machine as claimed in claim 76, wherein said mechanical member is arranged to act on the web material to apply a tension on the web material and cause the web material to tear.

78. (Previously Presented) The rewinding machine as claimed in claim 76, wherein said mechanical member is arranged to act on the web material to obstruct feed of the web material.

79. (Previously Presented) The rewinding machine as claimed claim 76, wherein said mechanical member includes tips or pins which penetrate the web material.

80. (Previously Presented) The rewinding machine as claimed in claim 76, wherein said mechanical interruption member is synchronized with said core feeder to act on the web material in conjunction with a winding core which is being fed along the channel.

81. (Previously Presented) The rewinding machine as claimed in claim 76, wherein said mechanical interruption member is arranged to move substantially orthogonally to a feed direction of the web material.

82. (Previously Presented) The rewinding machine as claimed in claim 81, wherein said mechanical interruption member is arranged to pinch the web material against a winding core.

83. (Previously Presented) The rewinding machine as claimed in claim 76, wherein said mechanical interruption member is a rotating member.

84. (Previously Presented) The rewinding machine as claimed in claim 83, wherein said mechanical interruption member is arranged to rotate around an axis substantially parallel to axes of rotation of said at least two rollers around which said flexible member runs, and at a moment when the web material is interrupted, protrudes towards said channel.

85. (Previously Presented) The rewinding machine as claimed in claim 83, wherein said mechanical interruption member is arranged to, at least during an interruption of said web material, to rotate at a peripheral speed different from a feed speed of the web material.

86. (Previously Presented) The rewinding machine as claimed in claim 70, further comprising a second winding roller, which defines with said first winding roller a nip for passage of the web material.

87. (Previously Presented) The rewinding machine as claimed in claim 86, wherein said nip is positioned substantially at an end of said channel of the winding cores.

88. (Previously Presented) The rewinding machine as claimed in claim 67, further comprising a glue applicator for applying glue on said cores.

89. (Previously Presented) Rewinding machine as claimed in claim 67, further comprising blower nozzles arranged to facilitate winding of a free edge of the web material around the winding core.

90. (Currently Amended) The rewinding machine as claimed in claim ~~79~~ 89, further comprising at least a first set of blower nozzles and a second set of blower nozzles

arranged upstream and downstream of the web material suction application area.

91. (Previously Presented) The rewinding machine as claimed in claim 90, wherein said first set of blower nozzles and said second set of blower nozzles are arranged on a common side of the channel.

92. (Previously Presented) The rewinding machine as claimed in claim 89, further comprising a third set of blower nozzles.

93. (Previously Presented) The rewinding machine as claimed in claim 89, wherein at least a portion of said blower nozzles is constructed and arranged to oscillate or rotate around a crosswise axis with respect to a feed direction of the web material.

94. (Previously Presented) The rewinding machine as claimed in claim 92, wherein at least one set of said blower nozzles is constructed and arranged to oscillate or rotate around a crosswise axis with respect to a feed direction of the web material.

95. (Previously Presented) The rewinding machine as claimed in claim 94, wherein said third set of blower nozzles oscillates.

96. (Previously Presented) The rewinding machine as claimed in claim 95, wherein said third set of blower nozzles is arranged on an opposite side of the channel with respect to said first set of blower nozzles and said second set of blower nozzles.

97. (Previously Presented) The rewinding machine as claimed in claim 89, wherein said rewinding machine has no means for applying glue to the winding cores and initiation of winding of each log is by said blower nozzles.

98. (Previously Presented) The rewinding machine as claimed in claim 67, wherein a path of the winding cores is constructed and arranged so that each core rolls along said path a distance sufficient to transfer a portion of glue previously applied on said core to a portion of the web material which will form a final free edge of the log.

99. (Previously Presented) The rewinding machine as claimed in claim 67, wherein said interruption member comprises at least one diverter element which acts on the web material across said feed member and protrudes into said channel.

100. (Previously Presented) The rewinding machine as claimed in claim 99, wherein said diverter element comprises at least one elastic lamina.

101. (Previously Presented) The rewinding machine as claimed in claim 99, wherein said interruption member comprises an actuator which acts on said at least one diverter element to cause movement or deformation thereof across said feed member towards an inside of said channel.

102. (Previously Presented) The rewinding machine as claimed in claim 101, wherein said actuator comprises at least one cam positioned, with respect to said feed member on an opposite side of said channel.

103. (Previously Presented) The rewinding machine as claimed in claim 99, wherein said feed member comprises at least two flexible members, and wherein said diverter element is positioned between said at least two adjacent flexible members.

104. (Previously Presented) The rewinding machine as claimed in claim 103, wherein said interruption member comprises a plurality of diverter elements positioned between adjacent flexible members.

105. (Previously Presented) The rewinding machine as claimed in claim 100, wherein said at least one elastic lamina is connected to a cross member positioned, with respect to said feed member, on an opposite side of said channel.

106. (Previously Presented) The rewinding machine as claimed in claim 105, wherein said cross member runs crosswise to a feed direction of the core in said channel, said at least one elastic lamina extending from said cross member in the feed direction.

107. (Currently Amended) The rewinding machine as claimed in claim ~~98~~ 99, wherein said diverter element is constructed and arranged to brake the core and slacken the web material upstream of the core.

108. (Currently Amended) The rewinding machine as claimed in claim ~~98~~ 99, wherein said diverter element is constructed and arranged to prevent slackening of the web material upstream of said core.

109. (Currently Amended) The rewinding machine as claimed in claim ~~98~~ 100, wherein activation of said elastic laminas is staggered over time to cause gradual breakage of said web material.

110. (Previously Presented) A method for producing logs of wound web material comprising:

– feeding a web material to a winding system along a feed path extending along a channel defined between a rolling surface and a movable core feed member;

– winding a first log of web material around a first winding core;

– inserting a new winding core in said channel and feeding said core along said channel with the web material between said core and said feed member; and

– interrupting the web material at an end of winding of said first log forming a final free edge of said first log and an initial free edge for winding of a second log,

wherein said web material is interrupted by an interruption member which acts on the web material along the channel on a side of the feed path opposite said rolling surface across said feed member.

111. (Previously Presented) The method as claimed in claim 110, wherein said winding system is a surface winding system comprising a winding cradle.

112. (Previously Presented) The method as claimed in claim 110, wherein said interruption member applies timed suction on the web material.

113. (Previously Presented) The method as claimed in claim 111, wherein said interruption member applies timed suction on the web material.

114. (Previously Presented) The method as claimed in claim 112, wherein the web material is fed along a counter

surface on which said suction is applied and along which said core feed member runs.

115. (Previously Presented) The method as claimed in claim 113, wherein the web material is fed along a counter surface on which said suction is applied and along which said core feed member runs.

116. (Previously Presented) The method as claimed in claim 114, wherein said counter surface is fixed.

117. (Previously Presented) The method as claimed in claim 114, wherein said timed suction is applied downstream of a position of said core along the feed path, causing interruption of the web material downstream of said core.

118. (Previously Presented) The method as claimed in claim 110, wherein said interruption member is a mechanical member which acts mechanically on the web material.

119. (Previously Presented) The method as claimed in claim 118, wherein the web material is pinched between said mechanical interruption member and said second core.

120. (Previously Presented) The method as claimed in claim 118, wherein said mechanical interruption member contacts the web material, the mechanical interruption member moving at a different speed from a feed speed of the web material.

121. (Previously Presented) The method as claimed in claim 110, wherein glue is applied on said winding cores.

122. (Previously Presented) The method as claimed in claim 121, wherein said glue is applied along at least one longitudinal line.

123. (Previously Presented) The method as claimed in claim 121, wherein at least a part of said glue is transferred to a portion of the web material belonging to a final free edge of the web material to close the final free edge of said log.

124. (Previously Presented) The method as claimed in claim 110, wherein winding of an initial free edge of the web material around said winding core is started or facilitated by one or more jets of air.

125. (Previously Presented) The method according to claim 110, wherein said interruption member includes at least one diverter element which is made to protrude into said channel when the web material is to be interrupted.

126. (Previously Presented) The method as claimed in claim 125, wherein said diverter element comprises an elastic lamina.

127. (Previously Presented) The method as claimed in claim 125, wherein said web material is interrupted causing

a plurality of said diverter elements to protrude into said channel.

128. (Previously Presented) The method as claimed in claim 127, wherein said diverter elements are made to protrude into said channel staggered over time to cause gradual breakage of the web material.